

District Counsel



Eastbourne can be proud of its brilliant Mini collection and Gerald Dale can be proud of being a top Mini expert

Gerald Dale is well known in Mini racing circles, so his garage is a top choice if you want Mini-friendly dyno testing. He wasn't afraid of Eastbourne & District MC's high-powered Mini army

Words and photos: Monty Watkins

There's no doubt that EDMC is one of the happening Mini clubs, with a strong core of active members. A turnout of 20 Minis for a dyno test is always a good indicator and to see everything from 848cc right up to Honda VTEC via 1380cc A-series is a top day out for us. There's clearly a lot of knowledge and experience gathered under the Eastbourne banner.

Particular thanks to Simon Bell and Dave Ward (ta for the 850 gearbox, Dave) for a top day.

This session brought in some Minis with alternative fuelling, from Dell'Orto DHLA to Weber downdraft to Rover MEMS and DTA management. It's very difficult to settle on an engine of the day, as there were so many cool choices. We were impressed with 42.1bhp from Clive Foster's 850 and Steve Smith's 84.2bhp JC Works twin-point proved that there are indeed some of the Worthing-converted Rovers that can get close to the promised 90bhp. Martin McCaffrey won top small bore power of 60.6bhp.

Paul Mellor won the A-series title on the day with 101.2bhp from a 1987 vintage 1330cc conversion, still using a dynamo and ignition points. For outright power, Toby Shoobridge took the flip-front option to fit his 1600 K-series conversion and was rewarded with a very useful 150.9bhp. Top of the bhp stakes was Steve Therly with a brilliant 1600 Honda VTEC that managed a huge 196.5bhp without a hint of forced induction! That's a fab engine, proving that motorcycle and car engine technologies are getting closer every day and that suits Minis fine.

This month Gerald Dale revealed that quite a few cars with excellent engine spec were let down by problems with the fuel mixture across a variety of carbs. Most of the affected cars could get better power and economy from a basic dyno tune-up. Useful to know before you damage an engine or fail an MOT expensively. Horsepower figures at this dyno test have been adjusted to give power at the engine.



Gerald Dale (left) and 'young Ben' taking care of business

MINIWORLD WOULD LIKE TO THANK:

Simon Bell and the excellent members of the Eastbourne & District Mini Owners Club (www.edmc.co.uk); Gerald Dale and young Ben at Gerald Dale Motorsport, Unit 1 Ninfield Garage, Bexhill Road, Ninfield, nr Battle, East Sussex TN33 9EE, tel: +44 (0)1424 893903; geraldale@btconnect.com www.geraldale.co.uk Book your Mini in for a power run at £47, or a basic rolling road tune-up is £82.25. Extra work is charged at £58.75 per hour.

ORGANISE YOUR OWN MINI CLUB POWERTEST

Every Mini should have a diagnostic power test at least once a year to highlight any engine problems. If you'd like *MiniWorld* to feature your club or inter-club Powertest day, then e-mail us at miniworld@ipcmedia.com or call us on +44 (0)20 8726 8364. We know a few Mini-friendly dyno garages that might do a club discount Powertest day for you.

NEIL WINFIELD Pick-up**34.9bhp****Tech spec:** 848cc, standard, manual transmission**Expected bhp:** "Hoping for 20-30bhp."**Bhp at flywheel:** 34.9bhp@4961rpm
Torque 42.7lb/ft@3942rpm**Tester says:** "Mixture okay all the way through. Timing chain rattle and gearbox bearing."**Owner's comment:** "Pretty impressed!"**CLIVE FOSTER Mini 850****42.1bhp****Tech spec:** 848cc, single SU HS4, K&N, LCB, RC40**Expected bhp:** "Going for 36!"
Bhp at flywheel: 42.1bhp@5168rpm
Torque 47lb/ft@4028rpm**Tester says:** "Nice 'n' loose! Way too rich at bottom end, 8.5% CO. Mid range is lean. Top end is spot on. Timing chain worn out."**Owner's comment:** "Not bad!"**JOHN SUTHERLAND Mini LE****48.9bhp****Tech spec:** 998cc Racing Green, Stage 2, Maniflow LCB, Maniflow straight single-box system, cone filter**Expected bhp:** "Anything above 30 I'll be happy."**Bhp at flywheel:** 48.9bhp@5070rpm
Torque 57.9lb/ft@3517rpm**Tester says:** "Could definitely improve. 7% CO at idle. Goes lean at high rpm. Modify needle and some attention to timing."**Owner's comment:** "Pleased! It's what I came here for!"**ALEX McCAFFREY Mayfair****54.6bhp****Tech spec:** 998cc, Stage 1, Maniflow inlet manifold and Freeflow exhaust manifold, K&N, new jet**Expected bhp:** "Got 49.5 about a year ago"
Bhp at flywheel: 54.6bhp@5472rpm
Torque 62.6lb/ft@3900rpm**Tester says:** "Too rich on idle, MOT fail, fast tickover. Reasonable power Stage 1."**Owner's comment:** "That's good! My daily runaround. Thought it would have deteriorated."**BILL DAVIES 1000 Auto****55.5bhp****Tech spec:** 1275cc Metro auto, Stage 1, single SU HIF44, Howley inlet manifold, twin-DTM exhaust system**Expected bhp:** "About 45-50."**Bhp at flywheel:** 55.5bhp@4950rpm
Torque 63.8lb/ft@3781rpm**Tester says:** "Fuelling too rich all the way. Maybe carb adjustment but it's not too bad. A proper tune could probably get 60bhp."**Owner's comment:** "Very happy with that!"**SHAWN FRIZZELL Cooper SPi****58.4bhp****Tech spec:** 1275cc SPi 'bog standard'**Expected bhp:** "Don't know."
Bhp at flywheel: 58.4bhp@4815rpm
Torque 72.6lb/ft@3828rpm**Tester says:** "Emissions! High CO. Could be sensor fault or cat fault."**Owner's comment:** "Yeah!"**MARTIN McCAFFREY Cooper****60.6bhp****Tech spec:** 998cc Mk2, Stark flowed head, standard valves, SW5 cam, balanced, Maniflow Lumenition, standard filter**Expected bhp:** "Anything over 55 would be nice."**Bhp at flywheel:** 60.6bhp@5931rpm
Torque 57.4lb/ft@4170rpm**Tester says:** "Way too rich, idle 9%CO, 11% flat out. Needle is too thin. Could definitely get more."**Owner's comment:** "Happy with that. There's more to come, even better!"**JOSIE COCKERTON Equinox SPi****61.8bhp****Tech spec:** 1275cc SPi, Maniflow RC40**Expected bhp:** "50bhp."
Bhp at flywheel: 61.8bhp@4892rpm
Torque 72.3lb/ft@3809rpm**Tester says:** "Fine all the way through. Perfect."**Owner's comment:** "Like he said, perfect. Nice to know what it does."

IAN WRIGHT Cooper Sport MPI 63bhp



Tech spec:
1275cc MPI,
standard

Expected bhp:
"About 50 I'd
guess."

Bhp at flywheel:
63bhp@4610rpm
Torque 80.3lb/
ft@3267rpm

Tester says:
"Slight miss
at high revs,
might be
plug. All as it
should be."

**Owner's
comment:**
"Better than I
thought."

RICKY BARTHOLOMEW Mini 66.2bhp



Tech spec: 1014cc,
Cooper, pocketed,
class 1 autocross
head, single HIF44,
MG Metro cam, S
rockers, lightened
and balanced, Aldon
distributor, Aldon
Ignitor, RC40, K&N

Expected bhp:
"Made 80 with a
45 Weber and 649
cam!"
Bhp at flywheel:
66.2bhp@5419rpm
Torque 66.4lb/
ft@4883rpmft@
4,044rpm

Tester says:
"Way too rich
all the way. 10%
CO at top end
but flat spot
3700-4700rpm,
lean. Needle and
timing."

**Owner's
comment:**
"For a 998,
it's lovely!"

SIMON BELL Balmoral MPI 70.2bhp



Tech spec:
1275cc MPI,
Stage 1,
Maniflow
downpipe, RC40,
K&N

Expected bhp:
"Would love to see
62bhp."

Bhp at flywheel:
70.2bhp@5539rpm
Torque 75lb/
ft@3597rpm

Tester says:
"All perfect.
Didn't miss a
beat."

**Owner's
comment:**
"Not good
enough!
Supercharger
next. I'll be
back!"

DAN FINN Mayfair Auto 70.3bhp



Tech spec:
1275cc Metro,
K&N

Expected bhp:
"Whatever it gets."
Bhp at flywheel:
70.3bhp@5414rpm
Torque 81.2lb/
ft@3991rpm

Tester says:
"Running too
lean. 1.5%
CO top end
but 0.6% on
part throttle"

**Owner's
comment:**
"Better than I
thought."

DES BASS Clubman Estate 71.2bhp



Tech spec:
1275cc, Stage
1, probably
MG Metro,
all Maniflow,
electronic
ignition, K&N

Expected bhp:
"35-40 brake."

Bhp at flywheel:
71.2bhp@5776rpm
Torque 79.1lb/
ft@4259rpm

Tester says:
"Fuelling goes
lean, 1.5%.
Could get some
more power"

**Owner's
comment:**
"Brilliant.
Better than I
expected!"

STEVE SMITH Cooper MPI 84.2bhp



Tech spec:
1275cc MPI,
John Cooper
Works 90bhp
conversion, no
cat

Expected bhp:
"Realistically, 60, I
reckon."
Bhp at flywheel:
84.2bhp@5506rpm
Torque 85.8lb/
ft@3649rpm

Tester says:
"Nothing wrong
with this."

**Owner's
comment:**
"Well
impressed!"

BEN WESTGATE Mayfair 86.2bhp



Tech spec: 1330cc, Stage
3 head, Weber 36 DCNV
downdraft, balanced,
1.5:1 roller rockers,
non-vacuum distributor,
Lucas electronic ignition,
LCB, stainless RC40

Expected bhp:
"Would like 75bhp."
Bhp at flywheel:
86.2bhp@6110rpm
Torque 82.3lb/
ft@4801rpm

Tester says:
"Had to back
off, far too
lean."

**Owner's
comment:**
"Very
pleased
with that"

PAT FOSTER 1100 Special 93bhp



Tech spec: 1380cc,
28/36 Weber carb, 285
cam, Aldon distributor,
S rockers, 73.5mm
Omega pistons,
lightened and balanced,
RC40, Maniflow system

Expected bhp:
"Would be nice to see
80-90. Fresh built."
Bhp at flywheel:
93bhp@5384rpm
Torque 97lb/
ft@3961rpm

**Tester
says:**
"Pokey up
to 5300
then tails
off"

**Owner's
comment:**
"Good!"

STEVE MEDHURST Cooper S Mk1

96.6bhp



Tech spec: 1380cc, Slark Stage 4 head, single SU HIF44, custom Maniflow Stage 2, SW5 cam, K&N

Expected power: "About 90bhp with luck."
Bhp at flywheel: 96.6bhp@5771rpm
Torque 100.4lb/ft@4110rpm

Tester says: "Bit lean low down, 1.5% CO. Flat out perfect. Maybe alter needle lower down."

Owner's comment: "That's cool. Alright. Not been tested with its twin carbs yet."

PAUL MELLOR Cooper S Mk1

TOP A-SERIES

101.2bhp



Tech spec: 1330cc, Kent Megadyne 285/2 cam, Swiftune head, twin-choke Dell'Orto 45DHLA carb, Maniflow LCB, RC40, straight-cut drops, dynamo, points

Expected power: "100bhp."
Bhp at flywheel: 101.2bhp@6480rpm
Torque 87.2lb/ft@5610rpm

Tester says: "Too rich, big flat spot, 8% CO flat out but idle very lean. Carb problem."

Owner's comment: "Impressed. Built in 1987 apart from the head."

TOBY SHOBRIDGE Mini Saloon

105.9bhp



Tech spec: 1600cc Rover K-series VVC, VVC inlet manifold, flip front, polished/ported head, own subframe, 56mm throttle body, standard length round nose, Rover MEMS injection, own exhaust

Expected power: "115-120."
Bhp at flywheel: 150.9bhp@7040rpm
Torque 115.8lb/ft@5730rpm

Tester says: "Fuelling okay, bogs down a bit early on."

Owner's comment: "Wow! Impressed with that."

STEVE THERLY Mini Sprite

TOP POWER

196.5bhp



Tech spec: 1600cc Honda B16A2 VTEC, DTA engine management system

Expected power: "160bhp, standard."
Bhp at flywheel: 196.5bhp@7289rpm
Torque 143.6lb/ft@7052rpm

Tester says: "Could easily get 200 with cams, etc."

Owner's comment: "Pretty good. Better than I expected."